

REMARKS/ARGUMENTS

In view of the foregoing amendments and the following remarks, the applicant respectfully submits that the pending claims are not anticipated under 35 U.S.C. § 102 and are not rendered obvious under 35 U.S.C. § 103. Accordingly, it is believed that this application is in condition for allowance. **If, however, the Examiner believes that there are any unresolved issues, or believes that some or all of the claims are not in condition for allowance, the applicant respectfully requests that the Examiner contact the undersigned to schedule a telephone Examiner Interview before any further actions on the merits.**

The applicant will now address each of the issues raised in the outstanding Office Action.

Objections

Claims 31 and 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form. Since these claims have been rewritten in independent form, they are now in condition for allowance.

Rejections under 35 U.S.C. § 112

Claim 32 stands rejected under 35 U.S.C. § 112, second paragraph, for failing to point out and distinctly claim the subject matter which the applicant regards as

the invention. Since this claim has been canceled, this ground of rejection is rendered moot.

Rejections under 35 U.S.C. § 102

Claims 1-5, 8-15, 17 and 20 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,441,854 ("the Fellegara patent"). The applicant respectfully requests that the Examiner reconsider and withdraw this ground of rejection in view of the following.

Independent claims 1, 9, 10 and 20 are not anticipated by the Fellegara patent (i) because the Fellegara patent does not teach a plurality of detectors which are provided corresponding to a position of a hand holding the camera during an image pickup, and (ii) because the Fellegara patent does not teach a preliminary operation for image pickup that can commence even if a shutter release switch is not pressed. These claims, as amended, are reprinted below with these features depicted in bold typeface.

1. An electronic camera comprising:
 **a plurality of detectors which
are provided corresponding to a
position of a hand holding the camera
during an image pickup, each of which
detectors being adapted to detect
contact or approach of a hand to make
an image pickup operation;**
 a mode setup unit which sets up
a stand-by mode in which an image
pickup device can commence an image
pickup operation immediately in
response to a release instruction,
wherein the stand-by mode is set, **a**

preliminary operation for image pickup can be entered even if a shutter release switch is not pressed; and

an image pickup controller which controls the camera to perform a preliminary operation for image pickup if both the stand-by mode is set by the mode setup unit all of the plurality of detectors detect the contact or approach of a hand, **wherein the preliminary operation can commence even if a shutter release switch is not pressed.** [Emphasis added.]

9. An electronic camera comprising:

a plurality of detectors which are provided corresponding to a position of a hand holding the camera during an image pickup, each of which detectors being adapted to detect contact or approach of a hand;

a mode setup unit which sets up a stand-by mode in which an image pickup device can commence an image pickup operation immediately in response to a release instruction, wherein the stand-by mode is set, **a preliminary operation for image pickup can be entered even if a shutter release switch is not pressed; and**

an image pickup controller which executes a preliminary operation for image pickup if both the stand-by mode is set by the mode setup unit, and at least one of the plurality of detectors detects the contact or approach of a hand, **wherein the preliminary operation can commence even if a shutter release switch is not pressed.** [Emphasis added.]

10. A method for controlling an electronic camera, comprising:

detecting contact or approach of a hand to a camera body, by each of a plurality of detectors which are provided corresponding to a position of a hand holding the camera during an image pickup;

bringing an image pickup system including at least an image pickup device into a stand-by state in which the image pickup system can commence an image pickup operation immediately in response to a release instruction, wherein if the stand-by state mode is set, **a preliminary operation for image pickup can be entered even if a shutter release switch is not pressed;** and

executing a preliminary operation for image pickup if both, and all the plurality of detectors detect the contact or approach of a hand, **wherein the preliminary operation can commence even if a shutter release switch is not pressed.** [Emphasis added.]

20. A method for controlling an electronic camera, comprising:

detecting contact or approach of a hand to a camera body using each of a plurality of detectors which are provided corresponding to a position of a hand holding the camera during image pickup;

bringing an image pickup system including at least an image pickup device into a stand-by state in which the image pickup system can commence an image pickup operation immediately in response to a release instruction, wherein if the stand-by mode is set, **a preliminary operation for image pickup can be entered even if a shutter release switch is not pressed;** and

executing a preliminary operation for image pickup if both at least one of the plurality of detectors detects the contact or approach of a hand, **wherein the preliminary operation can commence even if a shutter release switch is not pressed.** [Emphasis added.]

Each of these features is discussed below. First, however, the present invention and its advantages are discussed.

Embodiments consistent with the present invention provide a camera which is controlled to execute a preliminary operation for image pickup if the standby mode is set and contact or approach of a hand is detected by a plurality of detectors. To realize the above, claims 1 and 9, in particular, comprise "a plurality of detectors which are provided corresponding to a position of a hand holding the camera during an image pickup, each of which detectors being adapted to detect contact or approach of a hand to make an image pickup operation." Claims 10 and 20 comprise a step of "detecting contact or approach of a hand to a camera body, by each of a plurality of detectors provided corresponding to a position of a hand holding the camera during an image pickup."

On the other hand, the Fellegara patent does not disclose the structure "a plurality of detectors which are provided corresponding to a position of a hand holding the camera during an image pickup". The Examiner contends that in the Fellegara patent, the user's contact to the shutter button, removing of the lens cover and opening or closing the film cartridge door are considered

to be a plurality of detectors. (Paper No. 11, page 4.) The Examiner is interpreting "contact or approach of a hand to a camera body" as simply "contact of a hand to a camera body." However, in the claimed invention, the detectors are provided corresponding to a position of a hand holding the camera during image pickup. Since opening and closing a film cartridge door (which can occur well before or well after image pickup) or removing a lens cap (which can occur well before image pickup) do not necessarily correspond to a position of a hand holding a camera during image pickup, the claims are not anticipated by the Fellegara patent for at least this reason. Since claims 2-5 depend from claim 1, since claim 8 depends from claim 7, and since claims 11-15 and 17 depend, either directly or indirectly, from claim 10, these claims are similarly not anticipated by the Fellegara patent.

The Fellegara patent does not teach a preliminary operation for image pickup that can commence even if a shutter release switch is not pressed. The Examiner contends that in the Fellegara patent, a standby mode can be entered even if a shutter release switch is not pressed, citing column 10, lines 37-58. (Paper No. 11, page 4.) In particular, the Examiner contends that the camera of the Fellegara patent enters a power down mode when no action is taken for a predetermined time, but exits the power down mode if the shutter release button is pressed. However, this is not the same as entering a mode, even if the shutter release is not pressed, where image pickup can commence immediately as claimed.

An example of this is shown in Figure 3. Notice that even if even in the standby mode (provided that

sensor(s) detect the presence of a hand), processes that precede image pickup (e.g., auto-focus, auto-exposure, auto-white balance) are performed so that image pickup can take place immediately. More specifically, notice that even if the shutter release is not pressed (NO branch of S2), a stand-by mode may be entered. If the sensors detect hand (YES branches of S12, S14, and S15), an image pickup system (e.g., CCD 7) can commence an image pickup operation immediately, in response to a release button. (Note that S3-S5 have been performed, so image pickup (S7) can commence immediately upon shutter release (S6).) This is not taught by entering a leaving a standby mode in the Fellegara patent. That is, it is not taught that image pickup can occur immediately from a standby mode. Indeed, the Examiner concedes that in the Fellegara patent, one "must also half-press the shutter release button, before preliminary processing can begin." (Paper No. 11, page 2.) The Examiner indicated that this feature would make claims 1, 9, 10 and 20 allowable during a telephone call with the undersigned on May 27, 2004.

The Examiner also concedes that the Fellegara patent describes only one condition -- namely shutter release -- for initiating pre-exposure operations. (See Paper No. 11, page 4 and 5.) However, the Examiner contends that "it is inherent that the other conditions -- opening of the lens cover and closing of the cartridge door -- be met as well." (Paper No. 11, page 5.) The applicant does not believe that these conditions inherently must be met. In any event, these would be additional conditions to pressing the shutter release, not alternative conditions to pressing the shutter release. Thus, the

pre-exposure operations are not performed unless the shutter release is pressed (at least halfway, as is typical).

In view of the foregoing, independent claims 1, 9, 10 and 20 are not anticipated by the Fellegara patent. Since claims 2-5 depend from claim 1, since claim 8 depends from claim 7, and since claims 11-15 and 17 depend, either directly or indirectly, from claim 10, these claims are similarly not anticipated by the Fellegara patent.

Rejections under 35 U.S.C. § 103

Claims 6, 16, 25, 26, 29 and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Fellegara patent. The applicant respectfully requests that the Examiner reconsider and withdraw this ground of rejection in view of the following.

The Examiner contends that automatic white balance (AWB) adjustment is well known and it would have been obvious to perform AWB adjustment during preprocessing. (See Paper No. 11, page 7.) Even assuming, arguendo, that this is true, this does not compensate for the deficiencies of the Fellegara patent addressed above with respect to claims 1 and 10. Since claims 6 and 16 and depend from claims 1 and 10, respectively, these claims are not rendered obvious by the Fellegara patent for at least the reasons discussed above

The Examiner concedes that the Fellegara patent does not expressly disclose the type of detector used (to detect the user's contact to the shutter button, removal of the lens cover and opening or closing the film

cartridge door). To compensate for this admitted deficiency, the Examiner takes office notice that it is well known in the art to utilize photodetectors and similar touch sensors for detecting the approach or contact of a user, and that it would have been obvious to implement such teachings since the Fellegara patent does not expressly disclose the type of detector used. (See, Paper No. 11, page 7.) The applicant respectfully disagrees. One skilled in the art would not have been motivated to use a sensor for detecting **touch** in place of a sensor for detecting the **state** of a lens cover or film cartridge door. Accordingly, claims 25, 26, 29 and 30 are not rendered obvious for at least this reason.

Moreover, even if the one skilled in the art would have been motivated to modify the Fellegara patent as proposed by the Examiner, the resulting camera would still not compensate for the deficiencies of the Fellegara patent with respect to independent claims 1, 9, 10 and 20 for at the reasons discussed above. Thus, these claims are not rendered obvious by the Fellegara patent for at least this additional reason.

Claims 7, 18, 19, 21-24, 27 and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Fellegara in view of U.S. Patent No. 5,396,443 ("the Mese patent"). The applicant respectfully requests that the Examiner reconsider and withdraw this ground of rejection in view of the following.

Independent claims 7 and 18 are not rendered obvious by the Fellegara and Mese patents because these patents neither teach, nor suggest (i) a detector which is provided near a release button and adapted to detect an

approach of a hand to the release button to make an image pickup operation, and (ii) a preliminary operation for image pickup that can commence even if a shutter release switch is not pressed. These claims, as amended, are reprinted below with these features depicted in bold typeface:

7. An electronic camera comprising:
 a detector which is provided
 near a release button and adapted to
 detect an approach of a hand to the
 release button to make an image
 pickup operation;
 a main power switch which
 switches on and off a power source of
 the camera; and
 an image pickup controller which
 executes a preliminary operation for
 image pickup so that an image pickup
 operation can occur immediately in
 response to a release instruction, if
 both the power switch is set on and
 the detector detects the approach of
 a hand, **wherein the preliminary**
 operation for image pickup can
 commence even if a shutter release
 switch is not pressed. [Emphasis
added.]

18. A method for controlling an
electronic camera, comprising:
 detecting an approach of a hand
 to a release button by a detector
 provided near the release button;
 switching on and off a main
 power source of the camera; and
 executing a preliminary
 operation for image pickup so that an
 image pickup operation can occur
 immediately in response to a release
 instruction, if both the power switch
 is set on and the detector detects
 the approach of a hand, **wherein a**

preliminary operation for image pickup can commence even if a shutter release switch is not pressed.
[Emphasis added.]

Each of these features is addressed below.

The Fellegara and Mese patents neither teach, nor suggest a detector which is provided near a release button and adapted to detect an approach of a hand to the release button to make an image pickup operation. Even assuming, arguendo, that the lens cover detector and/or the film cartridge door detector are located near a shutter release button as the Examiner contends (See Paper No. 11, page 8.), this does not teach detecting the approach of a hand to the shutter release button. Moreover, even assuming, arguendo, that the Mese patent teaches leaving a power saving state upon approach of a user, it concerns touch sensitive displays, not shutter release buttons. Accordingly, even if one skilled in the art would have been motivated to combine these references as proposed by the Examiner, the combination would not teach or suggest detecting the approach of a hand to **a shutter release button.**

Thus, independent claims 7 and 18 are not rendered obvious by the Fellegara and Mese patents for at least this reason. Since claims 27 and 28 depend from claim 7, and since claim 19 depends from claim 18, these claims are similarly not rendered obvious.

Second, the Fellegara and Mese patents neither teach nor suggest a preliminary operation for image pickup that can commence even if a shutter release switch is not pressed. This feature, and the fact that it is not taught by the Fellegara patent, was discussed above. The

purported teaching of the Mese patent does not compensate for this deficiency. Accordingly, claims 21-24, which depend from claims 1, 9, 10 and 20, respectively, are not rendered obvious by the Fellegara and Mese patents for at least this reason.

Summary

The Fellegara patent neither teaches, nor suggests, a "stand-by mode" wherein the image pickup operation can commence immediately in response to a release instruction regardless of whether or not the shutter release switch is actuated. A camera with this feature can provide the following advantage which is not obvious from the references. That is, in such a camera, a preliminary operation is executed only when both the stand-by mode is set and all the plurality of detectors detach approach or contact of a hand. It is possible to set the stand-by mode regardless of whether or not the shutter release switch is operated (e.g., activating the switch). Therefore, a preliminary operation (e.g., electric conducting the CCD and processing each of automatic exposure, automatic focus adjustment, and automatic white balance adjustment for an image pickup can be carried out without executing any other operations when both the stand-by mode is set and all the plurality of detectors detach approach or contact of a hand. As a result, it is possible to accurately and quickly estimate a user's intention to make an image pickup operation with the camera in a state in which the stand-by mode is set. It is also possible to save power consumption by using a stand-b y mode in which the release time lag can be shortened during an image pickup.

On the other hand, the Fellegara patent merely concerns a preliminary operation for the first time when a shutter release switch is actuated. That is, the Fellegara patent discusses pre-exposure operations, such as auto focusing and exposure control for example, before digital image capture mode, **when the shutter button is pressed to a first position** (See, e.g., column 11, lines 43-59.), which is common in the art. The Mese patent merely concerns entering an active state when a sensor detects the approach of a user through a medium (such as a pen or finger). Therefore, a combination of Fellegara and Mese patents can merely realize a camera which shifts to a preliminary operation only when both the shutter release switch is actuated, and the detector detects the approach or contact of a hand. For example, a combination of Fellegara and Mese patents can, at best, provide a camera which can detect approach or contact of a hand. However, if a user approaches or contacts a camera **without the intention to make an image pickup operation**, and the shutter button is actuated, a preliminary operation for image pickup will be executed anyway. Thus, it is impossible to quickly and accurately determine whether or not the approach or contact of the hand to the camera is for an image pickup operation. Therefore, a camera using a "stand-by mode" cannot be realized, and it is impossible to achieve the above technical advantages of the present application which are not obvious from the references.

Amendments to the Specification

The specification has been amended to correct a minor error.

Entry of Amendments

The amendments should be entered because they place the application into conditions for allowance, and because they adopt recitations suggested by the Examiner. More specifically, Examiner Tillery telephoned the undersigned on May 27, 2004 and proposed amending claims 1, 9, 10 and 20, by Examiner's amendment, to add the recitation "wherein the preliminary operation can commence even if a shutter release switch is not pressed." When the undersigned called back on June 1, 2004 to authorize the Examiner's Amendment, the Examiner indicated that there were some additional issues with claims 7 and 18, and that the applicant should wait for the Office Action. Since the amendments to claims 1, 9, 10 and 20 adopt the Examiner's suggestion, and add some additional language, these amendments place the claims into condition for allowance. These amendments were not entered by Examiner's Amendment after telephone approval by the undersigned because of additional issues that the Examiner wanted to address in a written action. Claims 7 and 18 were amended to add the same recitation.

The amendments to claims 31 and 33 simply rewrite those claims into independent form.

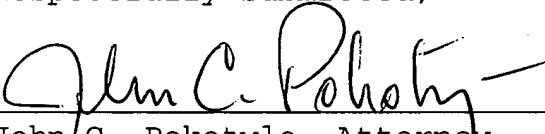
In view of the foregoing, these amendments should be entered.

Conclusion

In view of the foregoing amendments and remarks, the applicant respectfully submits that the pending claims are in condition for allowance. Accordingly, the applicant requests that the Examiner pass this application to issue.

Respectfully submitted,

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CERTIFICATE OF MAILING under 37 C.F.R. 1.8(a)

I hereby certify that this correspondence is being deposited on **November 8, 2004** with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.


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